Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (currently amended): A temperature control apparatus for a pulse width modulation

5   (PWM) device, the PWM device comprising:

a pulse width modulator for controlling a working frequency of the PWM

device;

a first switch controlled by the pulse width modulator, the first switch coupled

between an external power source and an output node of the PWM device; and

10   a second switch controlled by the pulse width modulator, the second switch

coupled between ground and the output node of the PWM device;

wherein the pulse width modulator controls operation of the first and second

switches according to a voltage level of an output voltage of the PWM device; and

the temperature control apparatus comprising:

15   a temperature detector installed around the PWM device for detecting a

present working temperature of the PWM device; and

a temperature comparator coupled to the temperature detector and the PWM

device for comparing the present working temperature with a maximum limiting

temperature and a minimum limiting temperature, wherein when the present

20   working temperature is higher than the maximum limiting temperature, [[a]] the

working frequency of the PWM device will be reduced in a step variation frequency,

and when the present working temperature is lower than the minimum limiting

temperature, the working frequency of the PWM device will be increased in the step

variation frequency.

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2 (original): A temperature control apparatus of claim 1, wherein when the present

working temperature is between the maximum limiting temperature and the minimum

limiting temperature, the working frequency of the PWM device will not be changed.

3 (original): A temperature control apparatus of claim 1, wherein the maximum limiting temperature, the minimum limiting temperature, and the step variation frequency are

5   adjustable.

4 (original): A temperature control apparatus of claim 1, wherein the working frequency will not be changed during a predetermined period after the last change of the working frequency.

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5 (original): A temperature control apparatus of claim 1, wherein the PWM device provides a current for a central processing unit.

6 (currently amended): A method for controlling the temperature of a PWM device

15   comprising:

       providing the PWM device, the PWM device comprising:

           a pulse with modulator for controlling a working frequency of the PWM device;

           a first switch controlled by the pulse width modulator, the first switch coupled

20   between an external power source and an output node of the PWM device; and

           a second switch controlled by the pulse width modulator, the second switch

coupled between ground and the output node of the PWM device;

           wherein the pulse width modulator controls operation of the first and second

switches according to a voltage level of an output voltage of the PWM device;

25   detecting a present working temperature of the PWM device;

       when the present working temperature is higher than a maximum limiting

temperature, reducing [[a]] the working frequency of the PWM device in a step variation

frequency; and

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when the present working temperature is lower than a minimum limiting temperature, increasing the working frequency of the PWM device in the step variation frequency.

5   7 (original): A method of claim 6, wherein when the present working temperature is between the maximum limiting temperature and the minimum limiting temperature, the working frequency will not be changed.

8 (original): A method of claim 6, wherein the maximum limiting temperature, the

10   minimum limiting temperature, and the step variation frequency are adjustable.

9 (original): A method of claim 6, wherein the working frequency will not be changed during a predetermined period after the last change of the working frequency.

15   10 (original): A method of claim 6, wherein the PWM device provides a current for a central processing unit.